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ABSTRACT OF THE DISCLOSURE

A method and preparation for the stimulation of tear secretion in a subject in need of such treatment is disclosed. The method comprises administering to the ocular surfaces of the subject a purinergic receptor agonist such as uridine 5'-triphosphate (UTP), dinucleotides, cytidine 5'-triphosphate (CTP), adenosine 5'-triphosphate (ATP), or their therapeutically useful analogs and derivatives, in an amount effective to stimulate tear fluid secretion and enhance drainage of the lacrimal system. Pharmaceutical formulations and methods of making the same are also disclosed. Methods of administering the same would include: topical administration via a liquid, gel, cream, or as part of a contact lens or selective release membrane; or systemic administration via nasal drops or spray, inhalation by nebulizer or other device, oral form (liquid or pill), injectable, intra-operative instillation or suppository form.